

=====

Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Keisha Douglas

Timestamp: [year=2008; month=9; day=23; hr=16; min=1; sec=29; ms=953;]

=====

Reviewer Comments:

<210> 35

<211> 204

<212> PRT

<213> Isoform A

<220>

<223> Cytokine

<440> 35

The above <213> response for sequence id# 35 is invalid, please correct the remaining sequences showing similar errors.

Application No: 10561826 Version No: 1.0

Input Set:

Output Set:

Started: 2008-08-22 17:29:01.943
Finished: null
Elapsed: null
Total Warnings: 2
Total Errors: 3
No. of SeqIDs Defined: 38
Actual SeqID Count: 2

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
E 104	Command to process tag does not exist: Tag: <440> in SEQID (1)
E 249	Order Sequence Error <223> -> <440>; Expected Mandatory Tag: <400> in SEQID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
E 104	Command to process tag does not exist: Tag: <440> in SEQID (2)

Sequence Listing

<110> Verfaille, Catherine
Jiang, Yuehua

<120> Neuronal Differentiation of Stem Cells
<130> 890003-2006.1

<140> 10561826
<141> 2008-08-22

<150> PCTUS04/21553
<151> 2004-07-02

<160> 38

<170> Microsoft Word 2003

<210> 1
<211> 23
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 1

Ala Ala Gly Ala Thr Gly Cys Ala Cys Ala Ala Cys Thr Cys Gly Gly
 5 10 15
Ala Gly Ala Thr Cys Ala Gly
 20

<210> 2
<211> 25
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 2
Cys Cys Ala Thr Gly Ala Cys Cys Thr Ala Thr Ala Cys Thr Cys Ala
 5 10 15
Gly Gly Cys Thr Thr Cys Ala Gly Gly
 20 25

<210> 3
<211> 18
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 3

Ala Gly Gly Cys Gly Cys Thr Gly Thr Thr Cys Gly Cys Ala Ala Ala
5 10 15
Gly Ala

<210> 4
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 4
Cys Cys Ala Gly Gly Cys Ala Thr Cys Ala Gly Ala Gly Cys Ala Cys
5 10 15
Ala Thr Cys Ala
20

<210> 5
<211> 21
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 5

Ala Ala Ala Cys Gly Cys Ala Ala Gly Ala Gly Gly Gly Ala Thr Gly
5 10 15
Ala Ala Gly Gly Thr
20

<210> 6
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 6
Thr Gly Thr Gly Thr Gly Gly Cys Ala Cys Cys Thr Gly Gly Ala Gly
5 10 15
Thr Thr Cys Ala
20

<210> 7
<211> 23
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 7

Gly Ala Gly Gly Ala Ala Ala Thr Gly Thr Ala Cys Cys Gly Thr Cys
5 10 15
Thr Gly Ala Thr Gly Cys Thr
20

<210> 8
<211> 23
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 8
Thr Gly Ala Ala Gly Ala Gly Ala Gly Cys Gly Gly Ala Gly Ala Ala
5 10 15
Gly Gly Ala Gly Ala Thr Cys
20

<210> 9
<211> 26
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 9
Gly Ala Gly Ala Ala Gly Ala Cys Ala Gly Thr Gly Ala Gly Gly Cys
5 10 15
Ala Gly Ala Thr Gly Ala Gly Thr Thr Ala
20 25

<210> 10
<211> 25
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 10
Gly Ala Gly Gly Ala Gly Thr Gly Gly Thr Ala Thr Cys Gly Gly Thr
5 10 15
Cys Thr Ala Ala Gly Thr Thr Thr Gly
20 25

<210> 11
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 11

Gly Thr Gly Cys Ala Gly Cys Thr Thr Gly Thr Thr Cys Gly Ala Cys
5 10 15
Thr Cys Cys Gly
20

<210> 12
<211> 22
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 12
Ala Gly Gly Thr Thr Gly Ala Cys Cys Gly Thr Gly Ala Gly Ala Gly
5 10 15
Cys Thr Gly Ala Ala Thr
20

<210> 13
<211> 22
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 13
Gly Cys Ala Ala Thr Cys Ala Thr Cys Ala Cys Cys Ala Cys Cys Thr
5 10 15
Cys Cys Ala Thr Thr Ala
20

<210> 14
<211> 23
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 14
Ala Gly Thr Thr Cys Thr Cys Cys Cys Ala Gly Gly Ala Cys Ala Thr
5 10 15
Thr Gly Gly Ala Cys Thr Thr
20

<210> 15
<211> 22
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 15
Gly Gly Ala Thr Gly Gly Ala Gly Thr Cys Thr Gly Ala Thr Gly Thr

5 10 15
 Cys Ala Cys Cys Ala Ala
 20

 <210> 16
 <211> 20
 <212> PRT
 <213> Artificial sequence

 <220>
 <223> Primer

 <440> 16
 Thr Thr Cys Cys Ala Ala Thr Gly Thr Gly Cys Ala Gly Cys Thr Gly
 5 10 15
 Ala Gly Thr Cys
 20

 <210> 17
 <211> 22
 <212> PRT
 <213> Artificial sequence

 <220>
 <223> Primer

 <440> 17
 Thr Gly Thr Ala Ala Thr Cys Cys Gly Gly Gly Thr Gly Thr Thr Cys
 5 10 15
 Cys Thr Thr Cys Ala Thr
 20

 <210> 18
 <211> 26
 <212> PRT
 <213> Artificial sequence

 <220>
 <223> Primer

 <440> 18
 Gly Ala Ala Gly Cys Thr Cys Cys Ala Thr Ala Thr Cys Cys Cys Thr
 5 10 15
 Gly Gly Gly Thr Gly Gly Ala Ala Ala Gly
 20 25

 <210> 19
 <211> 19
 <212> PRT
 <213> Artificial sequence

 <220>
 <223> Primer

 <440> 19
 Cys Cys Thr Cys Cys Thr Cys Gly Cys Gly Cys Ala Thr Gly Ala Ala
 5 10 15

```
<210> 20
<211> 21
<212> PRT
<213> Artificial sequence
```

```
<440> 20
Cys Gly Thr Cys Thr Gly Thr Gly Thr Gly Cys Cys Thr Gly Ala Cys
          5                      10                      15
Ala Cys Ala Thr Thr
          20
```

<220>
<223> Primer

```
<440> 21
Ala Ala Cys Ala Gly Gly Thr Cys Thr Cys Cys Cys Cys Gly Cys Ala
          5              10              15
Thr Cys Thr
```

<220>
<223> Primer

```
<440> 22  
Cys Ala Cys Cys Cys Thr Cys Ala Gly Gly Ala Ala Cys Ala Gly Ala  
                    5                      10                      15  
Gly Thr Gly Ala Cys Thr Thr  
                20
```

<220>
<223> Primer

```
<440> 23
Thr Cys Thr Thr Gly Ala Cys Cys Ala Thr Cys Ala Thr Cys Thr Thr
          5                      10                      15
Cys Thr Cys Cys Ala Gly Ala Thr Cys
          20                      25
```


<210> 24
<211> 24
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 24
Thr Cys Thr Gly Gly Ala Gly Thr Thr Ala Ala Gly Ala Ala Ala Thr
 5 10 15
Cys Gly Gly Ala Gly Cys Thr Gly
 20

<210> 25
<211> 21
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 25
Gly Cys Cys Thr Cys Thr Gly Thr Thr Cys Thr Cys Cys Ala Gly Cys
 5 10 15
Thr Thr Gly Cys Thr
 20

<210> 26
<211> 19
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 26
Gly Cys Cys Gly Cys Thr Cys Thr Ala Gly Gly Gly Ala Cys Thr Cys
 5 10 15
Gly Thr Thr

<210> 27
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 27
Ala Thr Gly Cys Thr Cys Thr Cys Thr Gly Gly Cys Thr Cys Cys Thr
 5 10 15
Thr Gly Gly Cys
 20

<210> 28
<211> 15

<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 28
Thr Gly Gly Gly Cys Ala Gly Gly Cys Ala Thr Gly Gly Gly Cys
5 10 15

<210> 29
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 29
Ala Thr Gly Gly Gly Cys Ala Cys Ala Thr Thr Gly Thr Gly Cys Thr
5 10 15
Thr Cys Thr Gly
20

<210> 30
<211> 21
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 30
Ala Cys Ala Cys Ala Gly Cys Cys Cys Ala Ala Ala Cys Thr Cys Cys
5 10 15
Ala Cys Ala Gly Thr
20

<210> 31
<211> 22
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 31
Thr Gly Ala Cys Gly Thr Thr Thr Cys Thr Cys Ala Gly Gly Cys Ala
5 10 15
Thr Thr Ala Ala Gly Cys
20

<210> 32
<211> 20
<212> PRT
<213> Artificial sequence

<220>

<223> Primer

<440> 32

Gly Gly Thr Gly Cys Ala Cys Thr Thr Gly Cys Thr Thr Gly Thr Gly
5 10 15
Cys Ala Gly Thr
20

<210> 33

<211> 288

<212> PRT

<213> Human Basic FGF

<220>

<223> Cytokine

<440> 33

Met Val Gly Val Gly Gly Gly Asp Val Glu Asp Val Thr Pro Arg Pro
5 10 15
Gly Gly Cys Gln Ile Ser Gly Arg Ala Ala Arg Gly Cys Asn Gly Ile
20 25 30
Pro Gly Ala Ala Ala Trp Glu Ala Ala Leu Pro Arg Arg Arg Pro Arg
35 40 45
Arg His Pro Ser Val Asn Pro Arg Ser Arg Ala Ala Gly Ser Pro Arg
50 55 60
Thr Arg Gly Arg Arg Thr Glu Glu Arg Pro Ser Gly Ser Arg Leu Gly
65 70 75 80
Asp Arg Gly Arg Gly Arg Ala Leu Pro Gly Gly Arg Leu Gly Gly Arg
85 90 95
Gly Arg Gly Arg Ala Pro Glu Arg Val Gly Gly Arg Gly Arg Gly Arg
100 105 110
Gly Thr Ala Ala Pro Arg Ala Ala Pro Ala Ala Arg Gly Ser Arg Pro
115 120 125
Gly Pro Ala Gly Thr Met Ala Ala Gly Ser Ile Thr Thr Leu Pro Ala
130 135 140
Leu Pro Glu Asp Gly Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys
145 150 155 160
Asp Pro Lys Arg Leu Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile
165 170 175
His Pro Asp Gly Arg Val Asp Gly Val Arg Glu Lys Ser Asp Pro His
180 185 190
Ile Lys Leu Gln Leu Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys
195 200 205

Gly Val Cys Ala Asn Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu
210 215 220

Leu Ala Ser Lys Cys Val Thr Asp Glu Cys Phe Phe Phe Glu Arg Leu
225 230 235 240

Glu Ser Asn Asn Tyr Asn Thr Tyr Arg Ser Arg Lys Tyr Thr Ser Trp
245 250 255

Tyr Val Ala Leu Lys Arg Thr Gly Gln Tyr Lys Leu Gly Ser Lys Thr
260 265 270

Gly Pro Gly Gln Lys Ala Ile Leu Phe Leu Pro Met Ser Ala Lys Ser
275 280 285

<210> 34

<211> 233

<212> PRT

<213> Human FGF-8

<220>

<223> Cytokine

<440> 34

Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
5 10 15

Val Leu Cys Leu Gln Ala Gln Glu Gly Pro Gly Arg Gly Pro Ala Leu
20 25 30

Gly Arg Glu Leu Ala Ser Leu Phe Arg Ala Gly Arg Glu Pro Gln Gly
35 40 45

Val Ser Gln Gln His Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu
50 55 60

Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly
65 70 75 80

Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu
85 90 95

Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly
100 105 110

Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met
115 120 125

Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp
130 135 140

Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr Ala Leu Gln
145 150 155 160

Asn Ala Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg Lys Gly Arg
165 170 175

Pro Arg Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu Val His Phe
 180 185 190

Met Lys Arg Leu Pro Arg Gly His His Thr Thr Glu Gln Ser Leu Arg
 195 200 205

Phe Glu Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu Arg Gly Ser
 210 215 220

Gln Arg Thr Trp Ala Pro Glu Pro Arg
 225 230

<210> 35
 <211> 204
 <212> PRT
 <213> Isoform A
 <220>
 <223> Cytokine
 <440> 35

Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
 5 10 15

Val Leu Cys Leu Gln Ala Gln His Val Arg Glu Gln Ser Leu Val Thr
 20 25 30

Asp Gln Leu Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg
 35 40 45

Thr Ser Gly Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala
 50 55 60

Met Ala Glu Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp
 65 70 75 80

Thr Phe Gly Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr
 85 90 95

Ile Cys Met Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys
 100 105 110

Gly Lys Asp Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr
 115 120 125

Ala Leu Gln Asn Ala Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg
 130 135 140

Lys Gly Arg Pro Arg Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu
 145 150 155 160

Val His Phe Met Lys Arg Leu Pro Arg Gly His His Thr Thr Glu Gln
 165 170 175

Ser Leu Arg Phe Glu Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu

```

                                180                               185                               190
Arg Gly Ser Gln Arg Thr Trp Ala Pro Glu Pro Arg
      195                          200

<210> 36
<211> 215
<212> PRT
<213> Isoform B


<220>
<223> Cytokine


<440> 36
Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
      5                      10                      15

Val Leu Cys Leu Gln Ala Gln Val Thr Val Gln Ser Ser Pro Asn Phe
      20                      25                      30

Thr Gln His Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu Ser Arg
      35                      40                      45

Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly Lys His
      50                      55                      60

Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu Asp Gly
      65                      70                      75                      80

Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly Ser Arg
      85                      90                      96

Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met Asn Lys
      100                     105                     110

Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp Cys Val
      115                     120                     125

Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr Ala Leu Gln Asn Ala
      130                     135                     140

Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg Lys Gly Arg Pro Arg
      145                     150                     155                     160

Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu Val His Phe Met Lys
      165                     170                     175

Arg Leu Pro Arg Gly His His Thr Thr Glu Gln Ser Leu Arg Phe Glu
      180                     185                     190

Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu Arg Gly Ser Gln Arg
      195                     200                     205

Thr Trp Ala Pro Glu Pro Arg
      210                     215

<210> 37

```

<211> 233

<212> PRT

<213> Isoform E

<220>

<223> Cytokine

<440> 37

Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
5 10 15

Val Leu Cys Leu Gln Ala Gln Glu Gly Pro Gly Arg Gly Pro Ala Le
20 25 30

Gly Arg Glu Leu Ala Ser Leu Phe Arg Ala Gly Arg Glu Pro Gln Gly
35 40 45

Val Ser Gln Gln His Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu
50 55 60

Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly
65 70 75 80

Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu
85 90 95

Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly
100 105 110

Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met
115 120 125

Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp
130 135 140

Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr Ala Le